

DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: April 30, 2018	WEATHER: Overcast with occasional showers, temperatures in the ~50s, patches of sun
Personnel and Visitors Onsite: Research vessel Tieton - <u>CDM Smith</u> : Wardah Azhar; <u>AECOM</u> : Anthony Palmieri; <u>Geosyntec</u> : Anne Fitzpatrick; <u>Gravity Marine</u> : Rene Trudeau, Maggie McKeen. Research vessel Cayuse – <u>CDM Smith</u> : Kyle Vickstrom; <u>AECOM</u> : Bruce Cassem; <u>Geosyntec</u> : Luke Smith; <u>Gravity Marine</u> : Peter Jenkins, Jeff Schut	
Planned Activity: <ul style="list-style-type: none">Collect surface sediment samples at random stratified sample locations near river mile (RM) 10 through 11 and SMA sediment samples in Swan Island Lagoon	
Activity Completed: <p>A tailgate safety meeting was led by AECOM. Topics included boat safety, hydration, and exclusions zones on the vessel. Other topics included housekeeping, pinch points, heat stress, location of emergency supplies, communication and readiness for unexpected boating hazards (waves, debris, etc), boat traffic.</p> <p>Wardah Azhar performed oversight of surface sediment sampling at random stratified locations from 08:00 to 18:08 on board the Tieton. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:</p> <ul style="list-style-type: none">3-point composite surface sediment samples were attempted at 2 random stratified sampling locations near RM 11 East. First location (PDI-SG-B399) was abandoned after 8 attempts at both alternate locations because of no recovery in hard sediment. Composite of 3 grabs less than 20cm (10cm, 17cm, and 17cm) was taken at PDI-SG-B414 for archiving.Four 3-point composite SMA Targeted surface sediment samples were taken in Swan Island Lagoon.Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.Position checks at PH-2 indicated that the vessel GPS was reading within 1.13 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP. <p>Kyle Vickstrom performed oversight of surface sediment sampling at random stratified locations from 08:00 to 18:10 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:</p> <ul style="list-style-type: none">Position checks at PH-2 indicated that the vessel GPS was reading within 1.0 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.3-point composite surface sediment samples were collected from 7 random stratified sampling locations near approximately RM 10W as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.MS/MSD was collected as described below.	
Status of Schedule & Priority Work: <ul style="list-style-type: none">The SMA targeted sampling will continue through the week. AECOM/Geosyntec are focusing on locations where good recovery is easily achieved. Agreement between EPA and the PreRD Group on sampling procedures is needed to resolve hard sediment sampling concerns in order to complete surface sediment sampling.Sample locations in areas of known/encountered heavy sheen contamination are planned to be skipped and returned to with support from NRC Environmental Services to contain sheen during sampling.Sampling is taking more time than initially projected.	
Issues/Concerns/Resolutions (include work performed that was not planned or anticipated): <p>The random stratified sample at PDI-SG-B414 was collected following a procedure that deviated from the FSP and from the EPA hard sediment conditions sampling protocol that EPA provided to AECOM on 4/20/2018 and directed them to follow. The EPA oversight staff notified the onboard contractor representative (Anne Fitzpatrick) that they were deviating from the plan and EPA did not approve or their modified approach. Despite the EPA oversight notification, the crew continued with implementation of the sampling at PDI-SG-B414. The oversight staff promptly notified EPA in the early afternoon of the noncompliance. Subsequently, EPA contacted AECOM management that EPA's hard sediment procedures must be followed and the contractor skipped hard sediment locations for the remainder of the day.</p>	

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):

On the Tieton, a stratified random surface sediment sample was collected between RM 11.1 and 11.6 East, approximately, at the following locations:

- PDI-SG-B414-BL1 (Alternate 1) – Within 50 ft radius, sandy gravel. This location was sampled by alternative sampling method not approved by EPA and AECOM indicated that it would be archived at the laboratory.

SMA targeted sediment samples were collected in the Swan Island Lagoon at the following locations:

- PDI-SG-S211 – Within 25 ft radius, clayey silt
- PDI-SG-S213 – Within 25 ft radius, clayey silt
- PDI-SG-S220 – Within 25 ft radius, silty clay with trace organic sheen
- PDI-SG-S215 – Within 25 ft radius, dark grey clayey silt with sand

On the Cayuse, stratified random surface sediment samples were collected at following locations between approximately RM 10 and 11 E with the last sample collected near RM 11 W:

- PDI-SG-B354-BL1 – Within 25 ft radius, silt with trace fine sand and trace organics
- PDI-SG-B356-BL1 – Within 25 ft radius, silt with trace fine sand
- PDI-SG-B358-BL1 – Within 25 ft radius, silt with trace organics; MS/MSD collected
- PDI-SG-B362-BL1 – Within 25 ft radius, silt with trace sand and silty sand below
- PDI-SG-B363-BL1 – Within 25 ft radius, silt with trace sand followed by silty sand
- PDI-SG-B367-BL1 – Within 50 ft radius, silt with silty sand
- PDI-SG-B368-BL1 – Within 25 ft radius, silt with trace fine sands

Note: Sediment descriptions are simplified and AECOM/Geosyntec provided more detailed sediment descriptions in their sampling notes.

Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):

None

Wastes Generated and How Handled:

- Excess sediment and debris in the power grab sampler and in the sampling bowls was rinsed back into the river per the FSP. No heavy sheen was observed.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily as needed for disposal to a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:

None

Signature: Wardah Azhar; Kyle Vickstrom

DATE April 30, 2018



Figure 1: Random stratified sampling field location notes (Tieton)